

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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07/985,141

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
07/985,141	12/03/92	KATSURA	R 501.26967R00

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EXAMINER

ZIMMERMAN, M

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2412PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 07/985,141	Applicant(s) Katsura et al	Examiner Mark K. Zimmerman	Group Art Unit 2412	

Responsive to communication(s) filed on Dec 18, 1996

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 44-66 is/are pending in the application.

Of the above, claim(s) none is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 44-66 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

 received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 18

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. Claims 44-66 are rejected as being based upon a defective reissue declaration under 35 U.S.C. § 251. See 37 C.F.R. § 1.175.

2. In view of the fact that amendments have been made to the claims, a new/supplemental oath or declaration complying with 37 C.F.R. § 1.175(a)(1), (a)(2) and/or (a)(3), (a)(5), (a)(6), and (a)(7) is required.

The declaration filed 8-17-95 refers to the amendment filed in response to the March 9, 1994 Office Action (Amendment A filed 9-9-94) but does not refer to any of the three amendments filed since (amendment B, filed 8-17-95; amendment C, filed 12-22-95; and amendment E, filed 12-18-96). In addition, the declaration does not address newly added claims 49-66.

3. The reissue oath or declaration filed with this application is defective because it lacks precise statements "distinctly specifying the excess or sufficiency in the claims" as required by 37 CFR 1.175 (a)(3).

Merely relisting the subject matter of each new claim does not meet the requirements of 37 CFR 1.175 (a)(3). Instead, applicants should distinctly specify the added or deleted subject matter of each new claim vis-a-vis the claims of the original

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patent. I.e. how each new claim differs from its closest counterpart claim in the patent (See MPEP 1414.01).

4. The reissue oath or declaration filed with this application is also defective because it fails to particularly specify the errors relied upon, as required under 37 C.F.R. § 1.175(a)(5).

The recitation of the additional claims and the very minor differences does not meet the requirement to "particularly specify the errors relied upon."

The reissue oath or declaration filed with this application is defective because it fails to particularly specify how the errors relied upon arose or occurred, as required under 37 C.F.R. § 1.175(a)(5). The declaration makes the statement at page 3 that the error was "due to the failure of the inventors and that of the Japanese Agent and U.S. Attorneys to fully appreciate and recognize that the invention could have been claimed more broadly." This statement must be corroborated by the U.S. attorneys involved in the prosecution of the patent by way of affidavit or declaration (37 CFR 1.175 (b)).

Such an affidavit or declaration should also address statements made by applicant's representative during the prosecution of the patent in the amendment filed 4-5-90. In particular, the following statement at page 15, lines 10-13

"Another feature of the invention resides in being able to use a

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smaller number of lines between a memory and the memory controller than are utilized between the data processor and the memory controller. Pinkham does not show or suggest this."

This rejection is directed to the new claims in the application. It is unclear why 23 claims are required to correct errors in the 8 original claims. It is unclear whether the applicant is really continuing prosecution rather than correcting errors (see In re Weiller, 229 USPQ 673). What was the void in the protection (provided by the patent claims) that necessitated all of the added claims.

Applicant is required to provide details regarding the above questions with respect to each of the added claims.

5. Claims 44-66 are rejected under 35 U.S.C. § 251 as not being directed to "the invention" disclosed in the original application. See MPEP 1412.01 and cases cited therein.

Claims 44-66 are directed to accessing memory within predetermined time periods and using a conversion means for converting the m-bit data to serial data while "the invention" disclosed in the original application is for an apparatus having the disclosed architecture in order to reduce the size and cost of the apparatus.

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6. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

Claims 44-66 are rejected under 35 U.S.C. § 103 as being unpatentable over Graciotti (4,716,527) in view of Takenaka (63-83844) and Pinkham (4,796,231).

a. As per independent claims 44, 49, 57, 59 and 63, Graciotti discloses at column 3, lines 1-50 a system which converts data to make an m byte wide data bus compatible with an n byte wide data bus (where $n > m$) by arranging or extracting

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upper and lower portions. Graciotti discloses at column 3, lines 9-11 and 48-50 that the operation is bidirectional. Graciotti further discloses at column 5, line 34 through column 6, line 36 that means are provided for selecting the lower byte and higher byte. Graciotti shows in figure 1 that storage means (31, 38 and 39) are provided for temporarily storing data.

It is noted that Graciotti does not explicitly disclose that graphics data is processed, however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graciotti as claimed because Graciotti discloses a bus conversion system for general purpose use including Input/output devices (column 2, line 48) and floppy disk controllers (column 2, lines 13-33) and such devices are often used to process graphics data. For example, it is well known in the art that input devices such as scanners and output devices such as crt displays require a memory for storing graphics data. It is also well known that graphics data can be stored in files which in turn can be stored on floppy disks. Since Graciotti does not limit the disclosed invention to any one type of data, it would have been obvious to one of ordinary skill in the art at the time the invention was made to used the conversion system disclosed by Graciotti for graphics data because this is suggested by Graciotti's disclosure at column 2, line 48 that the invention may be used for input/output devices.

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It is also noted that Graciotti does not explicitly disclose that retrieval is within "a predetermined period of time", however, this is known in the art as disclosed by Takenaka. Takenaka discloses a bus interface similar to Graciotti's and further discloses that the time required to the processor to access the ROM 11 is a predetermined period of time equal to two times the access time of the ROM. It would have been obvious to one of ordinary skill in the art at the time the invention was made to configure Graciotti as claimed because it is well known in the art that computer systems usually define a predetermined time for accessing memory (memory access time) and Graciotti teaches that the conversion is to be transparent, therefore it would have been obvious to maintain the predefined memory access time of the processor as claimed.

It is also noted that Graciotti does not explicitly disclose the claimed conversion means, however, this is known in the art as taught by Pinkham. Pinkham shows in figure 1 a memory access controller which includes storage means (34, 36, 38, 40 and 66) and means for converting the stored data into serial data for output to a display. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Pinkham into the system because, as noted above, Graciotti suggests use in a display system and

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Pinkham discloses that memory for displays usually requires conversion of data into serial form.

b. As per dependent claims 46-48, 50-56, 58, 60, 64 and 65, both Graciotti and Takenaka disclose a system which changes a single 16-bit memory access into two 8-bit memory accesses within a predetermined time (the time for the two 8-bit memory accesses).

c. As per dependent claim 66, Graciotti discloses that each m (8) bit portion is either the upper or lower portion of the n (16) bit data.

d. As per dependent claim 45, it is noted that Graciotti does not explicitly disclose a multiplexor, however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include this feature because Graciotti does disclose a system which selects between two portions of a word and multiplexors are often used to perform such selections.

e. As per claims 57-58, in addition to the rationale provided above, Pinkham also discloses the use of row and column addressing.

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7. Regarding the rejection under 35 USC 251, applicant argues that the statute and MPEP 1412.01 "is not concerned with the reasons or objects of the invention as alleged by the examiner but is only concerned that the reissue claims are directed to the invention as disclosed in the original application." The examiner does not agree with applicant's characterization of the statute or MPEP section. Applicant's argument appears to be directed to the enablement requirement of 35 USC 112, first paragraph. MPEP 1412.01 explains that

"The proper test is " an essentially factual inquiry confined to the objective intent manifested by the original patent. . . . Some disclosure in the original patent should evidence that applicant intended to claim or that applicant considered the material now claimed to be his or her invention."

From MPEP 1412.01, it is clear that not all disclosed material may be claimed in a reissue application. Only that which is the objective intent manifested by the original patent may be claimed. Based on a review of the original patent, it appears that the objective intent was to claim the disclosed architecture to reduce the size and cost of the apparatus. There does not appear to be any objective intent to claim accessing memory within predetermined time periods.

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Regarding the rejections under 35 USC 103, applicant first argues that the examiner's conclusion of obviousness is based upon improper hindsight reasoning. It must be recognized that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971). The use of computers for processing graphics data is notoriously well known in the art and this knowledge is not gleaned only from applicant's disclosure. For the reasons given in the rejection above, the examiner maintains the rejection.

Applicant also argues that Graciotti does not disclose successive retrieval from memory of successive groups of m bits of data during a predetermined period of time. This argument is moot in view of the new grounds for rejection.

Applicant also argues that the examiner has not address the claimed conversion means. The examiner apologizes for the oversight. This feature is addressed in the rejection above.

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8. Because of the new grounds for rejection, this action is made non-final.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Zimmerman whose telephone number is (703) 305-9798. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am-5:00pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (703) 305-9701. The fax phone number for this Group is (703) 305-9724.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.



Mark K. Zimmerman
Primary Examiner
Group 2400

MZ
March 8, 1997